

**REMARKS**

**Claim Rejections:**

Claims 1, 3, 5-7, 21 and 26-28 are all of the claims that have been examined in the present application, and currently all of the claims stand rejected.

Applicant has canceled claims 1, 3, 5-7, 26 and 28 without prejudice or disclaimer.

***35 U.S.C. § 103(a) Rejection - Claims 21 and 27:***

Claims 21 and 27 (the only claims pending in the present application) remain rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,227,642 to Hanabusa et al. (previously applied) in view of U.S. Patent No. 5,823,690 to Narushima et al. In view of the following discussion, Applicant respectfully traverses the above rejection.

As indicated previously, Hanabusa discloses a system and device which performs a discharge recovery process for an ink jet printing device and monitors an ink level in a waste tank, from the discharge recovery process. Specifically, Hanabusa discloses that the discharge recovery process is used to remove air bubbles, dust particles and overly viscous ink from the main ink supply so as to ensure proper printing. *See* Hanabusa, Col. 6, lines 9-20.

During the discharge recovery process, ink is sucked out by a pump 223 and is placed in an exhaust ink tank 224. *See id.* at col. 6, lines 39-46. Additionally, the device contains a unit 1003 which counts the number of discharge recovery operations that have been performed, including calculating the ink storage in the exhaust ink tank 224. *See id.* at col. 7, lines 26-40.

Thus, in Hanabusa, an amount of ink used and placed in the exhaust ink tank 224, during the discharge recovery process, is measured.

Narushima discloses using a memory device to store data regarding the printing characteristics of the print head of a printing device, such as dot density, etc. The data can be stored in an EE-PROM, where the EE-PROM “may be physically and electrically connected to a cartridge provided with the print head, while it may also be present by itself as an EE-PROM substrate and connected to the main body of the printer when the user connects the print head thereto.” Col. 15, lines 63-67.

In using this language from Narushima to reject the claims, the Examiner is equating the print head cartridge to an ink cartridge.

Specifically, in the October 7, 2004 Response, the Examiner has stated:

[Applicant’s] argument is not deemed to be persuasive because the Examiner is relying on the primary reference of Hanabusa to disclose that EE-Prom stores data related to ink quality. The secondary reference of Narushima teaches memory/recording medium is attached to the printer or to the cartridge is an equivalent structure known in the art (Column 15: line 65-67). The Examiner only relies on Narushima to have the EE-Prom attached to the cartridge not what information is stored in the EE-Prom. Therefore it would have been obvious to substitute the EE-Prom that attach to the cartridge for attach to the printer for the same purpose such as to retain information. (Office Action, page 4)

Thus, the Examiner is arguing that because of the disclosure in Narushima, it would have been obvious to take the EE-Prom of Hanabusa and attach it to the cartridge. However, to make this argument, the Examiner is ignoring the type of data stored in Narushima’s EE-Prom and is arguing that because of Narushima, it would have been obvious to move Hanabusa’s EE-Prom from the printer to the cartridge. Applicant disagrees with the Examiner’s above reasoning, and

submits that it would not have been obvious to combine the references as suggested by the Examiner.

Specifically, Applicant submits that it would not have been obvious for a skilled person to combine a recording medium which is attached to a printer (as is disclosed in Narushima), with disclosure of Hanabusa. This is because, currently in Hanabusa the EE-PROM stays with the printer when the ink cartridge is discarded. However, if Hanabusa was modified, as suggested by the Examiner, the EE-PROM would then be connected to the ink cartridge and would thus be discarded with the ink cartridge, when the cartridge was replaced. Because of this, a skilled artisan would not have been motivated to move Hanabusa's EE-PROM from the printer to an ink cartridge. Such a move would be contrary to the teachings of Hanabusa, and would not permit the Hanabusa device to function properly, as the memory would be discarded with each ink cartridge.

Further, the Examiner has not provided any clear motivation for making such a change in the Hanabusa device. The mere fact that this change "could have" been done is insufficient, by itself, to establish obviousness under 35 U.S.C. § 103(a).

Simply put, because of the goals and objects set forth by Hanabusa, a skilled artisan would not be motivated to place an EE-PROM on an ink cartridge which will be discarded, when this is contrary to the goals of Hanabusa. Namely, Hanabusa teaches that the EE-PROM is used to keep track of the number of discharge processes performed for the printer. (Col. 8, lines 21-38). Also, Hanabusa teaches that "each kind of ink jet printhead mounted has distinct waste ink exhaust properties .. which affect preliminary discharge amounts of waste ink." Abstract. Thus,

to properly monitor the discharge processes of the printer, including the amount of ink wasted, the EE-PROM needs to contain historical data. If the references were combined as suggested by the Examiner, this historical data would be lost each time the ink cartridge was replaced, which is typically frequently. At the very least, because the EE-PROM in Hanabusa is used to track historical data regarding the discharge operations performed, a skilled artisan would not be motivated to place the EE-PROM at a location where it will be discarded on a regular basis.

In view of the foregoing, Applicant submits that because of the teachings of both Hanabusa and Narushima, it would not have been obvious to one of ordinary skill in the art to combine the references as suggested by the Examiner. Therefore, the Examiner has failed to establish a *prima facie* case of obviousness with respect to claims 21 and 27, as required under 35 U.S.C. § 103(a). Accordingly, Applicant hereby requests the Examiner reconsider and withdraw the above 35 U.S.C. § 103(a) rejection of these claims.

**Conclusion:**

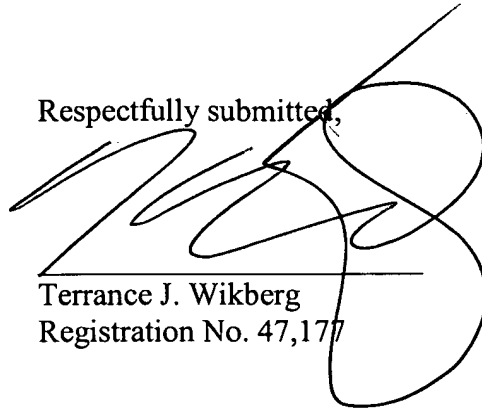
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. §1.116  
Application Number 10/092,616

Our Ref: Q68810  
Art Unit: 2853

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

A large, stylized handwritten signature in black ink, appearing to be 'TWIKBERG', is written over a horizontal line. The signature is fluid and cursive, with the last name being particularly prominent.

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